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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,481	04/07/2006	Frederic Cousin	608-455	8709

23117 7590 05/11/2009
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EXAMINER	
BOYKIN, TERRESSA M	
ART UNIT	PAPER NUMBER
1796	
MAIL DATE	DELIVERY MODE
05/11/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,481	COUSIN ET AL.	
	Examiner	Art Unit	
	Terressa M. Boykin	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3-3-09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Note that all responses to this action should be sent to Art Unit 1796 .

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d),

which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-14 are rejected under 35 U.S.C. 102(b) as being anticipated by "Solubility of ethylene, 1-butene and 1-hexene in polyethylenes" Chemical Engineering Science 56, 4121-4129. Steven J. Moore and Sieghard E. Wanke; or USP 5462531 see abstract ; or DE 4216960 see abstract.

Steven J. Moore and Sieghard E. discloses a gravimetric method used to measure the solubility of ethylene, 1-butene and 1-hexene for four polyethylene samples with different crystallinities and branching structures. Buoyancy corrections were made for polymer swelling; it was found that polymer volume varied approximately linearly with the amount of olefin absorbed. The solubility of ethylene, at temperatures of 30–90°C and pressures up to 3.5 MPa, was well described by Henry's law; Coefficients of Henry's law were in the range of 0.005–0.014 (gC_2H_4)/(PE·Mpa). The coefficients decreased with increasing temperature and increasing crystallinity. The solubility of 1-butene and 1-hexene, measured over the same temperature range and at pressures up to about 90% of the vapor pressures, did not follow Henry's law; these olefins were much more soluble than ethylene in all four types of polyethylene. Olefin solubility, based on amount of amorphous polyethylene, decreased with increasing polyethylene crystallinity and was also a function of the type of branching.

USP 5462531 discloses a syringe includes a barrel, a plunger, and an adapter for mounting the needle in the distal end of the barrel. The adapter includes a protrusion projecting away from the needle end and into the barrel defining an annular space between the barrel and the protrusion. The plunger and protrusion have complementary surfaces whereby the plunger may grip the adapter for removal of the adapter into the

interior of the barrel after use. These complementary surfaces afford initial resistance to further axial movement of the plunger toward the adapter, signaling the user that further axial pressure will permanently lock the plunger and adapter to one another whereby, upon application of full axial pressure on the plunger, the complementary surfaces of the plunger and adapter permanently lock to one another to enable joint unitary movement of the plunger and adapter together with the needle carried by the adapter into the barrel. The adapter includes vent passages communicating between the central passage through the adapter and the annular space whereby air can be vented from the barrel after receiving fluid within the barrel and prior to injection. Thus, the syringe may be oriented in a vertical position needle end uppermost with the vent passages forming the most superior portion of the barrel interior whereby air may be vented.

DE 4216960 discloses polymer chips are cooled in a storage blending silo by blowing gas or vapor through them. The cooling medium is pref. introduced at the bottom of the silo and is blown through while the silo is being filled or emptied. The cooling medium can be conditioned or contain reagents for treating the polymer. Alternatively it can be air.

More specifically the exit of a silo has an annular channel which is supplied with air from a fan via a heat exchanger. While the silo is being filled, air at about 40 deg.C enters through a grid and flows in counter flow up through the polymer chips. The polymer enters the silo at about 80 deg.C and the air leaves at 78 deg.C. When compared with a fluidized bed, the air consumption is reduced from 83300 kg/hr to 33000 kg/hr and the power consumption from 82 - 54 kW. Cooling is simpler than using a fluidized bed and consumes less power.

Each of the references discloses a *in part* a process wherein a separation of a volatile material takes places from particular polymer material. Note applicant(s) “comprising” is open language and does not exclude those additional moieties etc. disclosed herein. In view of the above, there appears to be no significant difference between the reference(s) and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

Information Disclosure Statement

Note that any information disclosure statements must comply with 37 CFR § 1.98(b), which requires a list of the publications to include: the author (if any), title, relevant pages of the publication, *date* and place of publication to be submitted for consideration by the Office.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terressa M. Boykin whose telephone number is 571 272-1069. The Examiner can normally be reached Monday- Friday 9:30-6:00 (work at home).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272-1078.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terressa M. Boykin/

Primary Examiner, Art Unit 1796